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(54) CONTROL METHOD FOR SPINDLE MOTOR FOR HEAD LOADING OF DISK DRIVE, AND ITS SYSTEM

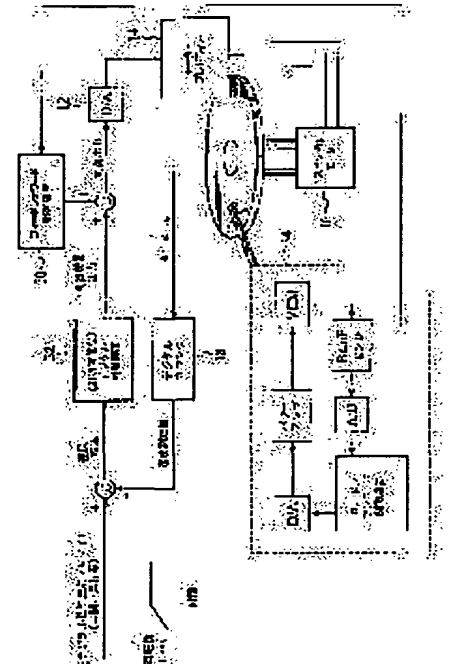
(57)Abstract:

PROBLEM TO BE SOLVED: To reduce latent possibility of delay in a servo control loop at the time of achieving an appropriate spindle speed by compensating previously drag effect in head loading from a lamp position of a disk drive.

SOLUTION: A feed forward control device 30 including a control loop is provided in a form of firmware, drag variation during head loading operation is decided, appropriate control is applied to a spindle motor 16 using expected drag variation, and drag variation is previously compensated.

That is, expected drag variation follows the prescribed variation generated by the prescribed servo mechanism system. The control device 30 compensates previously expected drag variation, and provides a feed forward control signal generating a control output signal converted by a D/A

12 to a motor pre-driver 14 by combining with an output signal of a control device of a digital control device 32. Therefore, control in which the speed of the spindle motor 16 is limited in a



specified tolerable range is performed during head load process.

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